1518 University Avenue | Flint, Michigan | 48504

Introduction

On Saturday, November 14, 2015, the Department of Licensing and Regulatory Affairs (DLARA) and the Department of Environmental Quality (DEQ), collectively (Team), conducted a sampling assessment of the plumbing system at Durant Tuuri Mott Elementary School to determine potential sources of lead and copper within the building.

The Team is in the process of replacing all drinking water fixtures in the school. Once replacements are completed, the Team will return and conduct an additional sampling assessment on the new fixtures.

The results of the November 14, 2015, sampling assessments are found below:

Water Service Information

A six-inch diameter cast iron water service line enters the school in a tunnel under the swimming pool area along the south corner of the pool area

Fixtures with Lead Levels Greater Than 15 Parts per Billion

Based on the sampling conducted, the following fixtures were found to have lead water level results greater than 15 parts per billion (ppb).¹

Location: Drinking Water Bubbler in Hallway between Pool and Gym, on Left, (01DW002)

Results: P1=16 parts per billion, P2=13 parts per billion

F01=3 parts per billion, F02=1 part per billion

Location: Classroom Faucet in Room 47, DHHS Office, Southwest Wall, (01CF006)

Results: P1=112 parts per billion, P2=23 parts per billion

F01=10 parts per billion, F02=2 parts per billion

Location Drinking Water Bubbler in Room 47, DHHS Office, Southwest Wall, (01DW007)

Results: P1=44 parts per billion, P2=11 parts per billion

F01=12 parts per billion, F02=5 parts per billion

Location Classroom Faucet in Room 39, Southwest Wall, (01CF010)

Results: P1=74 parts per billion, P2=15 parts per billion

F01=18 parts per billion, F02=4 parts per billion

¹ After a 12-hour stagnation period, the Team collected four (4) samples at each of the fixtures identified. Two (2) initial, 125-milliter samples (P1 and P2), were collected immediately after turning on the tap. The water was then flushed for 30 seconds and a third, 125-milliter sample (F01) was collected. Finally, the water was flushed for another two minutes, and the fourth 125-milliter sample (F02) was collected. These samples were used to determine the impact of any lead sources in and around each specific fixture and its connecting plumbing.

1518 University Avenue | Flint, Michigan | 48504

Location: Drinking Water Bubbler in Room 38, Northeast Wall, (01DW012)

Results: P1=20 parts per billion, P2=3 parts per billion

F01=2 parts per billion, F02=1 part per billion

Location: Drinking Water Bubbler in Room 32, Northeast Wall, (01DW020)

Results: P1=72 parts per billion, P2=8 parts per billion

F01=1 part per billion, F02=1 part per billion

Location: Classroom Faucet in Instructional Material Center, Northeast Wall, (01CF021)

Results: P1=11 parts per billion, P2=22 parts per billion

F01=8 parts per billion, F02=2 parts per billion

Location: Drinking Water Bubbler in Hallway across from Auditorium, (01DW022)

Results: P1=115 parts per billion, P2=58 parts per billion

F01=8 parts per billion, F02=1 part per billion

Location: Classroom Faucet in Room 70, Northeast Wall, (01CF024)

Results: P1=25 parts per billion, P2=21 parts per billion

F01=8 parts per billion, F02=2 parts per billion

Location: Drinking Water Bubbler in Room 70, Southwest Wall, (01DW025)

Results: P1=20 parts per billion, P2=16 parts per billion

F01=4 parts per billion, F02=3 parts per billion

Location: Drinking Water Bubbler in Room 62, Southeast Wall, (01DW026)

Results: P1=2856 parts per billion, P2=2204 parts per billion

F01=219 parts per billion, F02=27 parts per billion

Location: Classroom Faucet in Room 72, Southwest Wall, (01CF028)

Results: P1=15 parts per billion, P2=17 parts per billion

F01=5 parts per billion, F02=non-detect

Location: Drinking Water Bubbler in Room 75, Northwest Wall, (01DW032)

Results: P1=608 parts per billion, P2=375 parts per billion

F01=45 parts per billion, F02=5 parts per billion

Location: Classroom Faucet in Room 77, Northwest Wall, (01CF035)

Results: P1=18 parts per billion, P2=7 parts per billion

F01=1 part per billion, F02=non-detect

Location: Drinking Water Bubbler in Room 77, Southwest Wall, (01DW036)

Results: P1=48 parts per billion, P2=9 parts per billion

F01=4 parts per billion, F02=2 parts per billion

1518 University Avenue | Flint, Michigan | 48504

Location: Classroom Faucet in Room 78, Southwest Wall, (01CF037)

Results: P1=32 parts per billion, P2=42 parts per billion

F01=3 parts per billion, F02=non-detect

Location: Drinking Water Bubbler in Hallway between Rooms 78 and 79, (01DW038)

Results: P1=49 parts per billion, P2=8 parts per billion

F01=4 parts per billion, F02=2 parts per billion

Location: Classroom Faucet in Room 79, Northeast Wall, (01CF039)

Results: P1=20 parts per billion, P2=16 parts per billion

F01=non-detect, F02=non-detect

Location: Drinking Water Bubbler in Hallway near Room 2, on Right, (BDW043)

Results: P1=32 parts per billion, P2=4 parts per billion

F01=6 parts per billion, F02=26 parts per billion

Location: Drinking Water Bubbler in Hallway near Room 2, on Left, (BDW044)

Results: P1=39 parts per billion, P2=29 parts per billion

F01=38 parts per billion, F02=9 parts per billion

Location: Classroom Faucet in Room 3, Southwest Wall, (BCF045)

Results: P1=24 parts per billion, P2=40 parts per billion

F01=6 parts per billion, F02=3 parts per billion

Location: Drinking Water Bubbler in Hallway near Room 7, on Left, (BDW046)

Results: P1=16 parts per billion, P2=15 parts per billion

F01=10 parts per billion, F02=4 parts per billion

Location: Drinking Water Bubbler in Hallway near Room 7, on Right, (BDW047)

Results: P1=27 parts per billion, P2=18 parts per billion

F01=23 parts per billion, F02=14 parts per billion

Location: Drinking Water Bubbler in Room 7, (BDW048A)

Results: P1=59 parts per billion, P2=23 parts per billion

F01=non-detect, F02= non-detect

Location: Kitchen Faucet in Room between Rooms 12 and 13, Northeast Wall, (01KC049)

Results: P1=215 parts per billion, P2=52 parts per billion

F01=15 parts per billion, F02=2 parts per billion

1518 University Avenue | Flint, Michigan | 48504

Fixtures with Copper Levels Greater Than 1.3 Parts per Million

Based on the sampling conducted, the following fixtures were found to have copper water level results greater than 1.3 parts per million (ppm).¹

Location: Drinking Water Bubbler in Room 62, (01DW026)

Results: P1=23.60 parts per million, P2=16.90 parts per million

F01=2.71 parts per million, F02=0.44 parts per million

Location: Classroom Faucet in Room 62, Island, (01CF027)

Results: P1= 0.57 parts per million, P2=1.33 parts per million

F01=0.36 parts per million, F02=0.11 parts per million

Location: Classroom Faucet in Room 61, Island, (01CF029)

Results: P1= 0.52 parts per million, P2=1.34 parts per million

F01=0.51 parts per million, F02=0.08 parts per million

Location: Classroom Faucet in Room 59, Island, (01CF030)

Results: P1= 0.75 parts per million, P2=2.17 parts per million

F01=0.64 parts per million, F02=0.08 parts per million

Location: Drinking Water Bubbler in Room 75, (01DW032)

Results: P1=4.08 parts per million, P2=3.60 parts per million

F01=0.33 parts per million, F02=0.06 parts per million

Location: Kitchen Faucet in Room 13, (01KC049)

Results: P1=14.20 parts per million, P2=2.20 parts per million

F01=0.11 parts per million, F02=non-detect

1518 University Avenue | Flint, Michigan | 48504

Consecutive Sampling Results

This consecutive sampling was used to determine the impact of any lead sources located deep in the supply plumbing of the school building. Results of the consecutive sample monitoring are listed in the table below.

Consecutive Sample No.	1	2	3	4	5	6	7	8	9	10
LOCATION	LEAD RESULT (PARTS PER BILLION; ND = NOT-DETECTED)									
Room 47 Classroom Faucet (01CF006)	7	9	5	5	3	3	3	3	3	3
Instructional Materials Ctr. Classroom Faucet (CF021)	13	4	2	2	2	2	1	ND	ND	1
Room 59 Classroom Faucet (01CD030)	4	3	2	3	3	2	1	ND	ND	ND
Room 53 Kitchen Faucet (01KC041)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Room 7 Classroom Faucet (BCF048)	ND	ND	ND	ND	ND	ND	ND	1	1	1